HP Docket No. 10992208-1

IN THE CLAIMS:

- 1. (Canceled)
- 2. (Canceled)
- 3. (Canceled)
- 4. (Canceled)
- 5. (Canceled)
- 6. (Original) An error diffusion system, comprising:

resolution conversion means for transforming a pixel data value expressed as a fixed bit color space value of a given resolution into a like fixed bit color space value of another given resolution; and color space conversion means for transforming said like fixed bit color space value of another given resolution into a super pixel cell, wherein individual ones of the cells are assigned available output values where the average of the values in said cells is selected to be as close as possible to said fixed bit color space value of another given resolution.

7. (Original) An error diffusion method, comprising:

transforming a pixel data value expressed as a fixed bit color space value of a given resolution into a like fixed bit color space value of another given resolution; and

transforming said like fixed bit color space value of another given resolution into a super pixel cell, wherein individual ones of the cells are assigned available output values where the average of the values in said cells is selected to be as close as possible to said fixed bit color space value of another given resolution.

8. (Original) A multi-level error diffusion apparatus, comprising:

a processor for creating an m by n super pixel cell as an output pixel value for each individual one of a plurality of single input pixel values indicative of an image to be printed; and

said processor assigning to individual ones of the m by n super pixel cells available printer output color values where the average of the assigned output values are selected to be as close as possible to corresponding individual one of the single input pixel values.



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9. (Original) A multi-level error diffusion apparatus according to claim 8, further comprising:

a multi-level printer for receiving the individual ones of the m by n super pixel cells having assigned output values and for converting them into printer data to form a printed image.

10. (Original) A multi-level error diffusion method, comprising:

creating an m by n super pixel cell as an output pixel value for each individual one of a plurality of single input pixel values indicative of an image to be printed; and

assigning to individual ones of the m by n super pixel cells available printer output color values where the average of the assigned output values are selected to be as close as possible to corresponding individual one of the single input pixel values.

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